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Mor et al.

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(54) **GENERATION OF PATTERNED RADIATION**

(71) Applicant: **PrimeSense Ltd.**, Tel Aviv (IL)

(72) Inventors: **Zafir Mor**, Ein Habsor (IL);
Alexander Shpunt, Tel Aviv (IL)

(73) Assignee: **APPLE INC.**, Cupertino, CA (US)

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(58) **Field of Classification Search**

None

See application file for complete search history.

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Primary Examiner — Mark T Monk

(74) *Attorney, Agent, or Firm* — D.Kligler IP Services Ltd.

(57) **ABSTRACT**

Imaging apparatus includes an illumination assembly, including a plurality of radiation sources and projection optics, which are configured to project radiation from the radiation sources onto different, respective regions of a scene. An imaging assembly includes an image sensor and objective optics configured to form an optical image of the scene on the image sensor, which includes an array of sensor elements arranged in multiple groups, which are triggered by a rolling shutter to capture the radiation from the scene in successive, respective exposure periods from different, respective areas of the scene so as to form an electronic image of the scene. A controller is coupled to actuate the radiation sources sequentially in a pulsed mode so that the illumination assembly illuminates the different, respective areas of the scene in synchronization with the rolling shutter.

16 Claims, 8 Drawing Sheets

